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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 10/087,913 | 03/05/2002 | Kozo Shimizu | 020263 | 6062 |

23850 7590 12/17/2004

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EXAMINER

KOPEC, MARK T

ART UNIT PAPER NUMBER

1751

DATE MAILED: 12/17/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/087,913

Applicant(s)

SHIMIZU ET AL.

Examiner

Mark Kopec

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 16 September 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 10-17 and 21-34 is/are pending in the application.
- 4a) Of the above claim(s) 10-17 is/are withdrawn from consideration.
- 5) ☒ Claim(s) 28 is/are allowed.
- 6) ☒ Claim(s) 21-27 and 29-34 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 9/16/04 has been entered.

Claims 10-34 are currently pending with claims 10-20 withdrawn from consideration.

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

The previous prior art rejections are withdrawn in view of applicant's amendments and remarks.

Note the following new grounds of rejection.

Claims 21-26 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over JP 61-195941.

Note that a full English language translation has been ordered and will be provided to applicant as soon as possible.

JP 61-195941 discloses a bearing for motor having an excellent damping property, strength and wear resistance by compounding reinforced particles consisting of the pulverous

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particles of lead or zinc coated with copper or tin with a copper sintering alloy and binding the same with the copper or tin powder therein to form a solid solution. At least either of the reinforced particles consisting of the pulverous particles of lead or zinc coated with copper or the reinforced particles consisting of the above-mentioned pulverous particles coated with tin is compounded with the copper sintering alloy which is then sintered at a high temp. of about 750-800°C. The compounding ratio of the reinforcing particles mentioned above is made preferably 1-50wt%. The lead or zinc coated by the above-mentioned method is incorporated at a substantial ratio into the bearing without melted or evaporated even in high-temp. sintering, by which the damping property and wear resistance of the bearing are improved. The coating material of copper or tin binds with the copper powder or tin powder incorporated into the copper sintering alloy to form a bound solid solution structure of the α alloy layer having high strength. The strength of the bearing is thus increased (Abstract).

The disclosed Sn-coated Pb particles specifically or inherently meet each of the claimed limitations.

In the event that any minor modifications are necessary to meet the claimed limitations, such as selection of film

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thickness, such modifications are well within the purview of the skilled artisan.

Claims 21-27 and 29-34 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over JP 5-96396

Note that a full English language translation has been ordered and will be provided to applicant as soon as possible.

JP 5-96396 discloses creamy solder is mixed with solder base powder composed of complex particles having $\leq 100\mu\text{m}$ particle diameter and coating lead or tin-lead alloy on the surface of tin particles and adhesive, viscosity adjusting agent, etc., for obtaining the necessary adhesion and viscosity, etc. By using this, the soldering layer without developing bridge in the pad arranged at fine pitches of about 0.3mm can be formed and therefore, the mounting of an electronic parts having small lead pitch can be realized (Abstract). The working examples specify "rosin" at 40-50 wt parts (0015).

The disclosed rosin adhesive containing Pb or Pb alloy-coated tin particles specifically or inherently meet each of the claimed limitations.

In the event that any minor modifications are necessary to meet the claimed limitations, such as selection of film

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thickness, such modifications are well within the purview of the skilled artisan.

In view of the foregoing, the above claims have failed to patentably distinguish over the applied art.

Claim 28 is allowed. The above prior art does not disclose or suggest the resin component recited in the claimed Markush group.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mark Kopec whose telephone number is (571) 272-1319. The examiner can normally be reached on Monday - Friday from 9:30 AM to 6:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dr. Yogendra Gupta can be reached on (571) 272-1316. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Mark Kopec
Primary Examiner
Art Unit 1751

MK

December 12, 2004